MATERIAL SAFETY SHEET

1. IDENTIFICATION

Revision Date	July 2005
Product Name	GUM TURPENTINE
Other Names	PURE TURPENTINE ; WOOD TURPENTINE TURPENTINE OIL
Uses	As a source of oil of turpentine and gum rosin. As a constituent of stimulating ointments. As a solvent for waxes. In the production of synthetic camphor and menthol, shoe, stove and furniture polishes. Solvent for lacquers and paints, artists painting medium, medicine, perfumery.

Contact Information

Organisation	Location	Telephone	Ask For
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61 2 97333000	Technical Officer
	11 Mayo Road Wiri Auckland 2104 New Zealand	+64 9 2506222	
Poison Information Centre	Westmead NSW Australia	131126 1800-251525	
Chemcall	Australia	1800-127406	
	New Zealand	0800-243622	
National Poisons Centre	New Zealand	0800-764766	

2. HAZARD IDENTIFICATION

Hazardous according to criteria of NOHSC/ASCC.

Dangerous According to the Australian Code for the Transport of Dangerous Goods.

Classified as Dangerous Goods According to NZS 5433:1999.

HARMFUL

Risk Phrases	R10	Flammable.
	R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
	R36/38	Irritating to eyes and skin.
	R43	May cause sensitisation by skin contact.
	R51/53	Toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.
	R65	Harmful : may cause lung damage if swallowed.
Safety Phrases	S2	Keep out of reach of children.
	S36/37	Wear suitable protective clothing and gloves.
	S46	If swallowed, seek medical advice immediately and show this container or label.
	S61	Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets.
	S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

ERMA New Zealand Approval Code	HSR001233
HSNO Hazard Classification	3.1C 6.1D 6.3A 6.4A 6.5B 9.1C

This Material Safety Data Sheet may not provide exhaustive guidance for all HSNO Controls assigned to this substance. The ERMA Web Site should be consulted for a full list of triggered controls and cited regulations.

3. COMPOSITION/INFORMATION ON

Ingredients	Chemical Entity	CAS	Proportions
	GUM	[8006-64-2]	100

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure.

Swallowed	If swallowed, do NOT induce vomiting. Give a glass of water. Contact a doctor or Poisons Information Centre Phone 13-11-26.
Eye	Hold eyes open, flood with water for at least 15 minutes. See a doctor.
Skin	Wash affected areas thoroughly with copious amounts of clean water. If irritation occurs seek medical attention.

Inhaled	Remove victim to fresh air. If difficulty in breathing occurs, seek urgent medical attention.
Advice to Doctor	Treat symptomatically based on individual reactions of patient and judgement of doctor.
Aggravated medical conditions caused by exposure	No information available on medical conditions aggravated from this product.

5. FIRE FIGHTING MEASURES

Extinguishing Media	In case of fire, appropriate extinguishing media include foam, carbon dioxide or dry powder.
Hazards from Combustion Products	Products of combustion include oxides of carbon.
Special Protective Precautions and Equipment for Fire Fighters	Fire fighters should wear a self contained breathing apparatus and full protective clothing along with protective equipment.
Flammability Conditions	Flammable liquid.

Additional Information

Hazchem Code	3[Y]

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Personnel involved in the clean up should wear full protective clothing. Eliminate all sources of ignition. Increase ventilation. Avoid walking through spilled product as it may be slippery. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Authority. Use spark-proof equipment.
Methods and Materials for Containment and Clean Up	Soak up spilled product using absorbent non-combustible material such as as sand or soil. Avoid using sawdust or cellulose. When saturated, collect material into suitable, labelled, dry, sealable containers and hold for safe disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. procedures. Wash thoroughly after handling. Use spark proof tools and explosion proof equipment.

Conditions for Safe Storage (Including Any Incompatibles)	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiences such as damage or leaks. Protect against physical damage. Store away from incompatible materials.
Container Type	Steel drums.

8. EXPOSURE CONTROLS / PERSONAL

National Exposure Standards	Worksafe Australia recommends the following exposure standards : Gum Turpentine: 100ppm 557mg/m3
Biological Limit Values	No information available on biological limit values for this product.
Engineering	Ensure ventilation is adequate to maintain air concentration below exposure standards. If necessary, use local exhaust ventilation. Ventilation system must be explosion proof.
Personal Protection	RESPIRATOR: Wear an approved respirator if engineering controls are inadequate. EYES: Safety glasses. HANDS: Impervious gloves. CLOTHING: Wear appropriate protective clothing to minimize contact with with skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear colourless liquid
Formula	Unspecified.
Odour	penetrating odour
Vapour Pressure	Not applicable.
Vapour Density	Not applicable.
Boiling Point	155-170'C deg C
Melting Point	Not applicable.
Solubility in Water	Immiscible
Specific Gravity	0.860 (Water = 1)
Flash Point	Closed Cup 32'C
pH	Not applicable.
Lower Explosion Limit	Not applicable.
Upper Explosion Limit	Not applicable.
Ignition Temperature	Not applicable.
Specific Heat Value	Not applicable.
Particle Size	Not applicable.
Flame	Not applicable.
Properties of	

Propagation/Burning Rate of Solid Materials	Not applicable.
Potential for Dust Explosion	Not applicable. Product is a liquid.
Reactions that Release Flammable Gases	Not applicable.
Fast of Intensely Burning Characteristics	Not applicable.
Non-flammables That Could Contribute Unusual Hazards to a Fire	Not applicable.
Release of Invisible Flammable Vapours and Gases	No data available.
Decomposition Temperature	No data available.
Additional Information	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions of use and storage.
Conditions to Avoid	Avoid extreme heat and high temperatures.
Incompatible Materials	Avoid oxidizing agents, calcium hypochlorite, chlorine, chromic anhydride, anhydride, chromyl chloride, hexachloromelamine, stannic chloride, and trichloromelamine.
Hazardous Decomposition Products	Carbon monoxide.
Hazardous Reactions	Hazardous polymerization has not been reported.

11. TOXICOLOGICAL INFORMATION

Toxicity Data	No toxicological information available on this product.

Health Effects - Acute

Swallowed	Harmful. May cause gastrointestinal irritation with haemorrhage and

	congestion of intestines.
Eye	A severe irritant.
Skin	May cause skin irritation after prolonged or repeated contact.
Inhaled	Vapours can cause eye irritation, headache, dizziness and nausea.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data available.
Persistence and Degardability	No information available on persistence/degradability for this product.
Mobility	No information available on mobility for this product.
Environmental Fate (Exposure)	No information available on environmental fate for this product.
Bioaccumulative Potential	No information available on bioaccumulation for this product.

13. DISPOSAL CONSIDERATIONS

Disposal	Dispose of in accordance with all local, state and federal regulations.
Special Precautions for Land Fill or Incineration	Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

UN Number	1299
Shipping Name	GUM TURPENTINE
Dangerous Goods Class	3
Subsidiary Risk	Not applicable.
Pack Group	III
Precaution for User	HARMFUL
Hazchem Code	3[Y]

15. REGULATORY INFORMATION

No data available.

Poisons Schedule	5
EPG	14
AICS Name	TURPENTINE OIL
NZ Toxic Substance	N

16. OTHER INFORMATION

Literature References	No data available.
Sources for Data	No data available.

Legend to Abbreviations and Acronyms

<	less than
>	greater than
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstracts Service (Registry Number)
cm2	square centimetres
CO2	Carbon Dioxide
COD	Chemical Oxygen Demand
deg C ('C)	degrees Celsius
ERMA	Environmental Risk Management Authority
g	gram
g/cm3	grams per cubic centimetre
g/l	grams per litre
HSNO	Hazardous Substance and New Organism
IDLH	Immediately Dangerous to Life and Health
immiscible	liquids are insoluble in each other

kg	kilogram
kg/m3	kilograms per cubic metre
LC50	LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50	LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals
ltr	Litre
m3	cubic metre
mbar	millibar
mg	milligram
mg/24H	milligrams per 24 hours
mg/kg	milligrams per kilogram
mg/m3	milligrams per cubic metre
Misc	miscible
miscible	liquids form one homogeneous liquid phase regardless of the amount of either component present
mm	millimetre
mPa.s	milli Pascal per second
N/A	Not Applicable
NIOSH	National Institute for Occupational Safety and Health
NOHSC	National Occupational Health and Safety Commission
OECD	Organization for Economic Co-operation and Development
PEL	Permissible Exposure Limit
ppb	parts per billion
ppm	parts per million
ppm/2h	parts per million per 2 hours
ppm/6h	parts per millionper 6 hours
RCP	Reciprocal Calculation Procedure
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
tne	tonne
TWA	Time Weighted Average
ug/24H	micrograms per 24 hours
UN	United Nations (number)
wt	weight